

Remarks

The main thrust of this invention is based on specialized metal-coated sand which is calcined at a specific temperature in order to provide durable antimicrobial filters. Furthermore, the antimicrobial filter provides a unique organic antimicrobial agent, quaternary ammonium organosiloxane salt.

Nice uses the same starting material, silver nitrate, but reduces the silver salt to elemental silver. He suggests that the silver-coated sand may be optionally heated to 600-800°C to improve the adhesion of the silver to the sand. Nice never suggests to calcine the silver coated sand above 800°C.

Hansen teaches grafting a monomer with germicide with a catalyst to provide a germicidal filter, but he does not specify any quaternary ammonium salt, which is specified in the present invention as quaternary ammonium organosiloxane salt (p. 5 line 8-9 of application). Claims 3 and 4 further limit the silver and copper coated filters respectively. Claim 8, 9 and 11 further limit the process of employing said specific antimicrobial filters.

It is submitted that none of the references cited teach employing antimicrobial filters as claimed in the present invention by failing to suggest high calcining temperature to which the metallic coatings are subjected as claimed in the present invention.

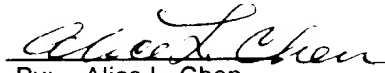
The reference does not cite the specific quaternary ammonium salt as claimed in the present application. Furthermore, none of the references show or suggest a mesh case for containing the filter as claimed in the present invention. All inventions seek improvement over the prior art and hindsight does not preclude such improvements. It is concluded that the processes as claimed in the present invention are distinct from the prior art.

Reconsideration and withdrawal of rejections are requested.

A new declaration will be submitted pending on the allowance of the claims.

Respectfully submitted

For : Shiao et al



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